04(o 0
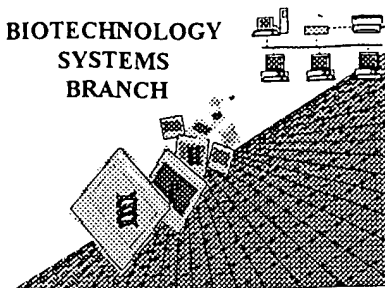02-02-01

RAW SEQUENCE LISTING
ERROR REPORT

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: _09/753,139_

Source: _OIPE_

Date Processed by STIC: _1/23/2001_

RECEIVED

APR 1 8 2001

TECH CENTER 1600/2900

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.
PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:
1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,
2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY
FOR CRF SUBMISSION QUESTIONS, PLEASE CONTACT MARK SPENCER, 703-308-4212.

FOR SEQUENCE RULES INTERPRETATION, PLEASE CONTACT ROBERT WAX, 703-308-4216.
PATENTIN 2.1 e-mail help: patin21help@uspto.gov or phone 703-306-4119 (R. Wax)
PATENTIN 3.0 e-mail help: patin3help@uspto.gov or phone 703-306-4119 (R. Wax)

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE **CHECKER VERSION 3.0 PROGRAM**, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW:

Checker Version 3.0

The Checker Version 3.0 application is a state-of the-art Windows based software program employing a logical and intuitive user-interface to check whether a sequence listing is in compliance with format and content rules. Checker Version 3.0 works for sequence listings generated for the original version of 37 CFR §§1.821 – 1.825 effective October 1, 1990 (old rules) and the revised version (new rules) effective July 1, 1998 as well as World Intellectual Property Organization (WIPO) Standard ST.25.
Checker Version 3.0 replaces the previous DOS-based version of Checker, and is Y2K-compliant. Checker allows public users to check sequence listings in Computer Readable form (CRF) before submitting them to the United States Patent and Trademark Office (USPTO).
Use of Checker prior to filing the sequence listing is expected to result in fewer errored sequence listings, thus saving time and money.

Checker Version 3.0 can be down loaded from the USPTO website at the following address:
http://www.uspto.gov/web/offices/pac/checker

Raw Sequence Listing Error Summary

| ERROR DETECTED | SUGGESTED CORRECTION | SERIAL NUMBER: _09/753,139_ |

1 _____ Wrapped Nucleics

The number/text at the end of each line "wrapped" down to the next line.
This may occur if your file was retrieved in a word processor after creating it.
Please adjust your right margin to .3, as this will prevent "wrapping".

2 _____ Wrapped Aminos

The amino acid number/text at the end of each line "wrapped " down to the next line.
This may occur if your file was retrieved in a word processor after creating it.
Please adjust your right margin to .3, as this will prevent "wrapping".

3 _____ Incorrect Line Length

The rules require that a line not exceed 72 characters in length. This includes spaces.

4 _____ Misaligned Amino Acid Numbering

The numbering under each 5th amino acid is misaligned. This may be caused by the use of tabs
between the numbering. It is recommended to delete any tabs and use spacing between the numbers.

5 _____ Non-ASCII

This file was not saved in ASCII (DOS) text, as required by the Sequence Rules.
Please ensure your subsequent submission is saved in ASCII text so that it can be processed.

6 _____ Variable Length

Sequence(s) _____ contain n's or Xaa's which represented more than one residue.
As per the rules, each n or Xaa can only represent a single residue.
Please present the maximum number of each residue having variable length and
indicate in the (ix) feature section that some may be missing.

7 _____ PatentIn ver. 2.0 "bug"

A "bug" in PatentIn version 2.0 has caused the <220>-<223> section to be missing from amino acid
sequence(s) _____. Normally, PatentIn would automatically generate this section from the
previously coded nucleic acid sequence. Please manually copy the relevant <220>-<223> section
to the subsequent amino acid sequence. This applies primarily to the mandatory <220>-<223>
sections for Artificial or Unknown sequences.

8 _____ Skipped Sequences (OLD RULES)

Sequence(s) _____ missing. If intentional, please use the following format for each skipped sequence:
(2) INFORMATION FOR SEQ ID NO:X:
(i) SEQUENCE CHARACTERISTICS:(Do not insert any headings under "SEQUENCE CHARACTERISTICS")
(xi) SEQUENCE DESCRIPTION:SEQ ID NO:X:
This sequence is intentionally skipped

Please also adjust the "(iii) NUMBER OF SEQUENCES:" response to include the skipped sequence(s).

9 _____ Skipped Sequences (NEW RULES)

Sequence(s) _____ missing. If intentional, please use the following format for each skipped sequence.
<210> sequence id number
<400> sequence id number
000

10 _____ Use of n's or Xaa's (NEW RULES)

Use of n's and/or Xaa's have been detected in the Sequence Listing.
Use of <220> to <223> is MANDATORY if n's or Xaa's are present.
In <220> to <223> section, please explain location of n or Xaa, and which residue n or Xaa represents.

11 _____ Use of <213>Organism (NEW RULES)

Sequence(s) _____ are missing this mandatory field or its response.

12 _____ Use of <220>Feature (NEW RULES)

Sequence(s) _____ are missing the <220>Feature and associated headings.
Use of <220> to <223> is MANDATORY if <213>ORGANISM is "Artificial" or "Unknown"
Please explain source of genetic material in <220> to <223> section.
(See "Federal Register," 6/01/98, Vol. 63, No. 104, pp. 29631-32)   (Sec. 1.823 of new Rules)

13 _____ PatentIn ver. 2.0 "bug"

Please do not use "Copy to Disk" function of PatentIn version 2.0. This causes a corrupted
file, resulting in missing mandatory numeric identifiers and responses (as indicated on raw sequence listing).
Instead, please use "File Manager" or any other means to copy file to floppy disk.

OIPE

pp 1-3

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/753,139

DATE: 01/23/2001
TIME: 10:38:55

Input Set : A:\ES.txt
Output Set: N:\CRF3\01232001\I753139.raw

**Does Not Comply
Corrected Diskette Needed**

```
 3 <110> APPLICANT: Quirk, Stephen
 4          Tyrrell, David
 6 <120> TITLE OF INVENTION: Design and Use of Advanced Zinc Chelating Peptides to Regulate Matrix
 7          Metalloproteinases
 9 <130> FILE REFERENCE: 44039-227522 11301-0200
11 <140> CURRENT APPLICATION NUMBER: US/09/753,139
11 <141> CURRENT FILING DATE: 2000-12-29
11 <160> NUMBER OF SEQ ID NOS: 10
13 <170> SOFTWARE: Patentin version 3.0
15 <210> SEQ ID NO: 1
16 <211> LENGTH: 7
17 <212> TYPE: PRT
18 <213> ORGANISM: Synthetic Peptide
20 <220> FEATURE:
21 <221> NAME/KEY: VARIANT
22 <222> LOCATION: (2)..(2)
23 <223> OTHER INFORMATION: X = Ser or Thr
26 <220> FEATURE:
27 <221> NAME/KEY: VARIANT
28 <222> LOCATION: (4)..(4)
29 <223> OTHER INFORMATION: X = Ser, Ala or Val
32 <400> SEQUENCE: 1
34 Cys Xaa Cys Xaa Pro His Pro
35 1                   5
37 <210> SEQ ID NO: 2
38 <211> LENGTH: 12
39 <212> TYPE: PRT
40 <213> ORGANISM: Synthetic Peptide
42 <220> FEATURE:
43 <221> NAME/KEY: VARIANT
44 <222> LOCATION: (1)..(1)
45 <223> OTHER INFORMATION: X = Ile or Val
48 <220> FEATURE:
49 <221> NAME/KEY: VARIANT
50 <222> LOCATION: (2)..(2)
51 <223> OTHER INFORMATION: X = Glu, Gln or Arg
54 <220> FEATURE:
55 <221> NAME/KEY: VARIANT
56 <222> LOCATION: (3)..(3)
57 <223> OTHER INFORMATION: X = Phe or Tyr
60 <220> FEATURE:
61 <221> NAME/KEY: VARIANT
62 <222> LOCATION: (4)..(4)
63 <223> OTHER INFORMATION: X = Ile or Val
66 <220> FEATURE:
67 <221> NAME/KEY: VARIANT
68 <222> LOCATION: (5)..(5)
```

(Global error)
Per 1.823 of new Sequence Rules, the only valid (213) responses are: Unknown, Artificial Sequence, or scientific name (Genus/species) (one of the three)
(see circled portion of Item 12 on Error Summary Sheet)

```
 69 <223> OTHER INFORMATION: X = Tyr or His
 72 <220> FEATURE:
 73 <221> NAME/KEY: VARIANT
 74 <222> LOCATION: (7)..(7)
 75 <223> OTHER INFORMATION: X = Ala, Pro or Glu
 78 <220> FEATURE:
 79 <221> NAME/KEY: VARIANT
 80 <222> LOCATION: (8)..(8)
 81 <223> OTHER INFORMATION: X = Pro, Phe or Ala
 84 <220> FEATURE:
 85 <221> NAME/KEY: VARIANT
 86 <222> LOCATION: (9)..(9)
 87 <223> OTHER INFORMATION: X = Ser, Asp or Met
 90 <220> FEATURE:
 91 <221> NAME/KEY: VARIANT
 92 <222> LOCATION: (10)..(10)
 93 <223> OTHER INFORMATION: X = Ala or Ser
 96 <220> FEATURE:
 97 <221> NAME/KEY: VARIANT
 98 <222> LOCATION: (11)..(11)
 99 <223> OTHER INFORMATION: X = Val or Leu
102 <220> FEATURE:
103 <221> NAME/KEY: VARIANT
104 <222> LOCATION: (12)..(12)
105 <223> OTHER INFORMATION: X = Cys or Gly
108 <400> SEQUENCE: 2
110 Xaa Xaa Xaa Xaa Xaa Thr Xaa Xaa Xaa Xaa Xaa Xaa
111 1               5                   10
113 <210> SEQ ID NO: 3
114 <211> LENGTH: 9
115 <212> TYPE: PRT
116 <213> ORGANISM: Synthetic Oligonucleotide
118 <220> FEATURE:
119 <221> NAME/KEY: VARIANT
120 <222> LOCATION: (1)..(1)
121 <223> OTHER INFORMATION: X = Met, Val or Leu
124 <220> FEATURE:
125 <221> NAME/KEY: VARIANT
126 <222> LOCATION: (2)..(2)
127 <223> OTHER INFORMATION: X = His, Phe or Tyr
130 <220> FEATURE:
131 <221> NAME/KEY: VARIANT
132 <222> LOCATION: (3)..(3)
133 <223> OTHER INFORMATION: X = Ile or Thr
136 <220> FEATURE:
137 <221> NAME/KEY: VARIANT
138 <222> LOCATION: (4)..(4)
139 <223> OTHER INFORMATION: X = Thr, His or Gly
142 <220> FEATURE:
```

This is not a nucleotide sequence see p. 1 regarding <213> response [handwritten annotation]

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/753,139

DATE: 01/23/2001
TIME: 10:38:55

Input Set : A:\ES.txt
Output Set: N:\CRF3\01232001\I753139.raw

```
143 <221> NAME/KEY: VARIANT
144 <222> LOCATION: (5)..(5)
145 <223> OTHER INFORMATION: X = Leu or Thr
148 <220> FEATURE:
149 <221> NAME/KEY: VARIANT
150 <222> LOCATION: (7)..(7)
151 <223> OTHER INFORMATION: X = Asp, Asn or Ser
154 <220> FEATURE:
155 <221> NAME/KEY: VARIANT
156 <222> LOCATION: (8)..(8)
157 <223> OTHER INFORMATION: X = Phe or Tyr
160 <220> FEATURE:
161 <221> NAME/KEY: VARIANT
162 <222> LOCATION: (9)..(9)
163 <223> OTHER INFORMATION: X = Ile or Val
166 <400> SEQUENCE: 3
168 Xaa Xaa Xaa Xaa Xaa Cys Xaa Xaa Xaa
169 1                5
171 <210> SEQ ID NO: 4
172 <211> LENGTH: 7
173 <212> TYPE: PRT
174 <213> ORGANISM: Synthetic Oligonucleotide
176 <400> SEQUENCE: 4
178 Cys Ser Ala Val Pro Val His
179 1                5
181 <210> SEQ ID NO: 5
182 <211> LENGTH: 7
183 <212> TYPE: PRT
184 <213> ORGANISM: Synthetic Peptide
186 <400> SEQUENCE: 5
188 Asp Ser Ala Val Pro Val His
189 1                5
191 <210> SEQ ID NO: 6
192 <211> LENGTH: 9
193 <212> TYPE: PRT
194 <213> ORGANISM: Synthetic Peptide
196 <400> SEQUENCE: 6
198 Ile Tyr Thr Ala Cys Met Ser Ala Val
199 1                5
201 <210> SEQ ID NO: 7
202 <211> LENGTH: 7
203 <212> TYPE: PRT
204 <213> ORGANISM: Synthetic Peptide
206 <400> SEQUENCE: 7
208 Val His Thr His Leu Cys Asp
209 1                5
211 <210> SEQ ID NO: 8
212 <211> LENGTH: 5
213 <212> TYPE: PRT
```

OK -->

not a nucleotide sequence see p. 1 regarding <213> responses

see p. 1 regarding <213> responses

Input Set : A:\ES.txt
Output Set: N:\CRF3\01232001\I753139.raw

```
214 <213> ORGANISM: Synthetic Peptide
216 <400> SEQUENCE: 8
218 Cys Thr Cys Val Pro
219 1                   5
221 <210> SEQ ID NO: 9
222 <211> LENGTH: 4
223 <212> TYPE: PRT
224 <213> ORGANISM: Synthetic Peptide
226 <400> SEQUENCE: 9
228 Cys Asp Ile Cys
229 1
231 <210> SEQ ID NO: 10
232 <211> LENGTH: 5
233 <212> TYPE: PRT
234 <213> ORGANISM: Synthetic Peptide
236 <400> SEQUENCE: 10
238 His Thr Ile Thr His
239 1                   5
```

VERIFICATION SUMMARY
PATENT APPLICATION: US/09/753,139

DATE: 01/23/2001
TIME: 10:38:56

Input Set : A:\ES.txt
Output Set: N:\CRF3\01232001\I753139.raw

L:11 M:270 C: Current Application Number differs, Replaced Current Application No
L:11 M:271 C: Current Filing Date differs, Replaced Current Filing Date
L:34 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1
L:110 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2
L:168 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3